Foreign Subsidiary Exit from Africa: The Effects of Investment Purpose Diversity and Orientation

FOREIGN SUBSIDIARY EXIT FROM AFRICA: THE EFFECTS OF INVESTMENT PURPOSE DIVERSITY AND ORIENTATION

Abstract

Plain language summary

Our understanding of multinational enterprise (MNE) strategy and performance in Africa is limited. This study seeks to make a contribution by examining the exit implication for foreign subsidiaries of entry to the African market and considering potential strategies to mitigate the economic challenges and/or tap into strategic benefits of investing in the continent. Using a sample of Japanese foreign subsidiaries operating in Africa and the OECD countries, we find that those that are in Africa have a greater exit likelihood than their counterparts. This is likely because the economic challenges of operating in Africa tend to outweigh the corresponding strategic benefits. We also find that subsidiaries that enter the African market with diverse investment purposes and greater market-seeking orientation are likely to enjoy flexibility, adaptability, and learning advantages useful in mitigating the economic challenges and/or capitalizing of strategic opportunities.

Technical summary

This study examines how the decision to enter African markets relates to the exit probability of MNE subsidiaries. Using a longitudinal, paired-sample design of Japanese foreign subsidiaries operating in Africa and OECD countries, we find that entry to Africa increases the hazard rate of subsidiaries, but that subsidiaries entering with more diverse investment purposes and greater market-seeking orientation have a better survival likelihood. Consistent with the institutional-based theory of corporate diversification, our findings introduce purpose diversity and market-seeking orientation as potential mechanisms to mitigate the hazards of institutional voids/instability. Also, by looking at the phenomenon of within-subsidiary diversity (of purposes) and its interaction with institutional conditions, we advance the notion of *subsidiary scope* and its implications.

Key Words: Entry to Africa, investment purpose, market-seeking orientation, institutional voids, institutional instability

INTRODUCTION

Emerging markets are places of striking contrasts. On one hand, they are characterized by 'institutional voids' (Santangelo and Meyer, 2011), where market-supporting institutions are absent, weak, or fail to accomplish the role expected of them (Mair and Marti, 2009) and 'institutional instability', resulting from such exogenous forces as a sudden change of government (Hoskisson *et al.*, 2000; Walsh, 2015; Zoogah, Peng, and Woldu, 2015). These institutional conditions are in large part responsible for the exceedingly high levels of uncertainty which multinational enterprises (MNEs) face when conducting business there (Dai, Eden, and Beamish, 2013; Williamson, 2000; North, 1991; Santangelo and Meyer, 2011, Xu and Meyer, 2013). Yet, with established markets fast becoming saturated, MNEs are increasingly turning to emerging markets for future growth potential. As well, the lack of institutions to foster competition in those markets means that MNE subsidiaries already operating in those markets are more likely to develop market power and thus generate supernormal profits (Chacar and Vissa, 2005; Chacar, Newburry, and Vissa, 2010; Miller and Eden, 2006).

Underlying these arguments regarding the institutional context of emerging markets are two contrasting mechanisms: *economizing* and *strategizing*. The economizing mechanism emphasizes increased transaction and transformation costs associated with performing in locations with high levels of institutional voids/instability; the strategizing mechanism, however, supports the opposite view that missing/unstable institutions act as entry barriers, which afford MNE subsidiaries already operating in those locations with greater market power and rent-seeking opportunities (Williamson, 1991; Porter, 1981). Do the strategizing upsides more than offset the economizing downsides associated with operating in locations of high institutional voids/instability? Do the economic implications outweigh the market power benefits? Or, do the effects cancel out? Answers to these

questions are likely to be context dependent and contingent on several boundary conditions. In this research, we seek to shed light on the issue by examining the exit implications of entry to the African context and considering the effects of relevant boundary conditions.

By emphasizing the remarkable degree of heterogeneity among emerging markets, recent research in the area calls for future research to advance a more fine-grained understanding of institutions and their performance implications (Hoskisson *et al.*, 2013). Africa, for example, has distinct characteristics. Generally, the level of institutional voids is greater in Africa than in any other region in the world (Azzimonti and Sarte, 2007; Zoogah *et al.*, 2015). Also, highly unstable institutional environments and discontinuous institutional transitions beset foreign investment in Africa, perhaps more so than in any other part of the world (Azzimonti and Sarte, 2007; Henisz, 2000). The combined presence in the African markets of such institutional hazards makes for a complex operating environment for foreign subsidiaries (Jackson, 2004). Whereas economizing challenges abound, so do strategizing opportunities. In other emerging markets such as China and India—countries on which existent emerging markets research disproportionately relies—institutional voids and instability are not nearly as high as in Africa and thus economizing challenges and strategizing opportunities are relatively limited (Hoskisson *et al.*, 2013; Zoogah *et al.*, 2015). The African market, therefore, present an interesting setting to generate fresh insights about the influences of institutional voids and dynamics on the performance of MNE subsidiaries. As well, research in a context that has largely been ignored by global strategy scholars can promote better understanding of what Hoskisson *et al.*, (2013) called the 'traditional emerging markets'.

Relatedly, we consider relevant boundary conditions that may enable some subsidiaries operating in Africa better deal with, mitigate, or even capitalize on the lack and/or instability of institutions. Specifically, we consider two such conditions, namely subsidiary *purpose diversity* and *purpose orientation*,

to understand whether/how these strategic factors can help to mitigate the hazards of institutional voids and instability. Research on investment purpose features in the investment motives literature. Dunning (1998), for example, identified four major categories of motives that underlie MNEs' foreign investment: resource seeking, market seeking, efficiency seeking, and strategic-asset seeking. This classification not only indicates the limitation in a wholesale treatment of MNEs' foreign investment but also fosters a better understanding of the inherent, strategic heterogeneity among MNE subsidiaries. A related line of research on subsidiary mandate/charter has refined this insight further (e.g., Birkinshaw, 1996; Birkinshaw and Hood, 1998). Building on the investment motives literature, research on subsidiary mandate/charter looks at, among other things, the performance implications of the specific purposes for which subsidiaries are established (Birkinshaw and Hood, 1998). It also provides theoretical arguments and empirical evidence suggesting that some subsidiaries may be responsible for a diverse group of purposes (Birkinshaw, 1996).

By integrating insights from these related streams of literature, we examine whether purpose diversity of subsidiaries operating in Africa influence their exit likelihood. Following a similar logic from the institutional-based view of diversification, we argue that subsidiaries which enter Africa with diverse investment purposes are in a better position to deal with institutional challenges than their counterparts. Also, we consider whether the type of investment purpose assigned to a subsidiary influences its ability to mitigate the effects of incomplete markets in Africa. In particular, we consider how the market-seeking orientation of a subsidiary relates to its ability to overcome institutional voids. We argue that the unique structure (i.e., less globally integrated and more locally responsive) and strategy (i.e., substantial reliance on host country market) of such subsidiaries (Nachum and Zaheer, 2005; Slangen and Beugelsdijk, 2010) makes for better learning and adaptation useful in reducing exit probability.

We test these arguments using a longitudinal, paired-sample design of Japanese subsidiaries operating in Africa and OECD countries. Selection bias poses a significant threat to our desire to understand the survival implications of entry to Africa. Clearly, MNE subsidiaries operating in Africa are not randomly selected; rather, they have self-selected themselves into the African market and are more likely to have different characteristics from those investing elsewhere. As a result, we employed an econometric strategy called *Propensity Score Matching* (PSM) to identify counterfactual cases of matching subsidiaries operating elsewhere. To achieve greater variation, we identified 'control' subsidiaries with an equal propensity of entering Africa but which actually entered the OECD group. We consider those subsidiaries entering Africa to be the 'treatment' group. Using this strategy creates a quasi-experimental condition, thus limiting endogeneity concerns (Reeb, Sakakibara, and Mahmood, 2012).

This study is important in at least five ways. First, by engaging the economic and strategic implications of institutional voids/instability and considering potential boundary conditions, we seek to advance a more nuanced understanding of the relationship between institutions and subsidiary exit. Also, the use of a paired-sample design with substantial between-group variation in institutional conditions makes for a greater confidence in our results. Second, we bring to the fore the notion of *subsidiary scope* and its performance implications. Prior research in global strategy has considered scope mainly at the firm level, thereby limiting our understanding of scope at the subsidiary level. Research on the diversity/type of subsidiary purposes can address this gap. Also, considering the potential interaction between subsidiary scope and investment location can help us understand how subsidiary scope may be contingent on the institutional conditions of the host country and how, if at all, subsidiaries modify their scope to embed elements of flexibility into their structure. Third, in looking at investment purposes, we depart from existing emphasis on the 'how' questions (e.g., entry mode research) and focus on those that look at the 'why' of investing in emerging markets. Fourth,

we contribute to the institutional voids literature by suggesting response mechanisms operating at the subsidiary level. We find that subsidiaries with diverse investment purposes and greater market-seeking orientation can deal with institutional voids/instability better than their peers. Fifth, global strategy research has largely ignored Africa as a research setting, limiting our understanding of this region. Our research responds to the numerous calls to help fill this gap (e.g., Jackson, 2004; Walsh, 2015; Zoogah *et al.*, 2015).

In the sections to follow, we present theoretical arguments leading to our hypotheses. We then discuss the design we employed to answer the research questions, along with the modeling procedure applied for the purpose. Next, we present results and discuss their implications. We conclude by discussing our contributions and highlighting limitations and promising directions for future research.

THEORETICAL DEVELOPMENT

The notion of institutions and their influences on organizations has been central to emerging market research. Institutional economists consider institutions, '…humanly devised constraints that structure political, economic, and social interactions' (North, 1991: 97). Their view of institution is as one that is created to bring order to exchanges and reduce attendant uncertainty (North, 1991). This view largely underpins our understanding of how institutions (or lack thereof) influence business strategy as well as performance. Weak and/or unstable institutions characterizing emerging markets pose economic challenges in the form of increased uncertainty and transaction costs (Khanna and Palepu, 1997; North, 1991; Williamson, 2000). Whereas research in global strategy has provided considerable support to this argument, some other research has provided contrasting evidence.

Notably, Chan, Isobe, and Makino (2008) find that subsidiaries operating in countries with less developed institutions, on average, registered better performance than their counterparts. This

finding was inconsistent with their prediction, which drew on arguments from institutional economics and the institutional voids literature. A potential explanation of this finding rests in the market failure literature in strategic management that points to the strategic opportunities inherent in the weakness and/or instability of institutions (Taussig and Delios, 2015). This literature suggests that less developed institutions create market power opportunities for those firms with the required set of resources and capabilities. Therefore, a potential explanation of such contrasting finding as that in Chan *et al.* (2008) rests in the possibility that the strategic advantages of weak institutions outweigh corresponding economic challenges. A joint consideration of the economic as well as strategic implications of institutions is, therefore, key for a better understanding of institutions and their influence on firm/subsidiary performance (Nickerson, Hamilton and Wada, 2001; Williamson, 1999).

Williamson (1991) has identified two different approaches to business strategy: *economizing* and *strategizing*. Whereas the former is mainly concerned with organizational efficiency, the latter emphasizes market power advantages. Teece, Pisano, and Shuen (1997) further clarified this classification by identifying the theoretical underpinnings of each. Economizing holds that the route to competitive advantage is through minimization of transaction and transformation costs (Teece, Pisano, and Shuen, 1997; Williamson,1991); strategizing suggests that competitive advantage results from limitations on competition and building defensible positions against competitive forces (Porter, 1981; Teece et al., 1997). Given that institutions determine the levels of transaction/ transformation costs and market competition (North, 1990; Williamson, 2000), they are likely to have both economizing and strategizing implications.

The economizing implications arise largely from two sources: *institutional voids* and *institutional instability* (Santangelo and Meyer, 2011). Institutional voids refer to contexts "…where institutional

arrangements that support markets are absent, weak, or fail to accomplish the role expected of them" (Mair and Marti, 2009: 422). Institutional voids lead to *informational problems*, inefficient judicial systems (*enforcement problems*), and misguided regulation (*competition problems*) that render host markets less efficient (Khanna and Palepu, 1997). These problems give rise to increased levels of uncertainty and transaction costs (North, 1991; Williamson, 2000). On the other hand, emerging markets are also characterized by institutional instability arising, for example, from an abrupt change of government and/or discontinuities in government policies and actions (Azzimonti and Sarte, 2007). Such changes and their consequences are usually difficult to predict and can adversely affect the capital, factor, and product markets in which MNE subsidiaries conduct their businesses (Khanna *et al.*, 2005).

Foreign subsidiaries operating in locations with institutional voids often face problems in obtaining (reliable) information about potential exchange partners. In advanced markets, such institutions as rating agencies, chambers of commerce, and other independent (third-party) organizations provide useful information about customers, distributors, and suppliers. In contrast, in emerging markets, MNE subsidiaries have to make do without this essential input. As a result, they face much greater uncertainty and transaction costs than their counterparts operating in advanced markets (Dhanaraj and Khanna, 2011; Khanna and Palepu, 1997).

Locations with institutional voids are also fraught with enforcement problems. Even if partners have been identified and exchange contracts have been made, the issue of whether these partners will honor the transaction commitments is important. Strong contract and property rights enforcement mechanisms (e.g., sound and reliable court systems) are essential to provide incentives for honoring contracts; however, such mechanisms are largely missing in emerging markets, subjecting

subsidiaries to the hazards of opportunistic behaviours and attendant inefficiencies (Williamson, 2000).

Emerging markets are also lacking in institutions useful to promote competition in product as well as factor markets. For example, entry barriers in a subsidiary's factor markets can decrease the number of suppliers available. In the product market, such barriers can limit the number of intermediaries with which a foreign subsidiary can work (Dhanaraj and Khanna, 2011; Khanna and Palepu, 1997). Such limits to competition in any of or both markets can undermine the bargaining power of the foreign subsidiaries, resulting in higher costs of operating (Porter, 1981). On the other hand, regulatory restrictions encourage rent-seeking practices by government officials—practices that may adversely affect the performance of foreign subsidiaries (World Bank, 2002).

In addition to extant institutional voids, uncertainty occasioned by the dynamic, changing nature of institutions can affect the performance of foreign subsidiaries operating in emerging markets. Instability of government regulations and other institutional elements requires foreign subsidiaries to frequently adapt to these changes (Meyer and Peng, 2016). Also, emerging markets such as those in Africa often have a highly fragile political climate, with political conflicts arising unexpectedly and promising countries suddenly falling into disorder (Zoogah *et al.,* 2015). Since foreign subsidiaries are often considered by Africans as agents of imperialistic rule, they are highly susceptible to attacks following political crisis (Chironga *et al.,* 2011). Such attacks may range from introducing policy changes that adversely affect operations to reneging on contracts and even to the expropriation of assets.

These economizing challenges notwithstanding, weak institutions make for considerable strategizing (positioning) benefits. Two lines of arguments suggest a possible net-positive performance implication of operating in emerging markets. First, the lack of regulations promoting competition in

the market where a focal subsidiary is operating can help the subsidiary secure market power and subsequently gain greater economic rent than would be possible otherwise. As well, because of their affiliation with MNEs, foreign subsidiaries are likely to have more resources with which to influence governments than local firms do and therefore can more easily (than in OECD countries) exploit institutional voids and weak governments to get an advantage[1]. This view of 'institutional voids as opportunities' is also emphasized elsewhere, albeit from a slightly different angle (Dhanaraj and Khanna, 2011; Khanna and Palepu, 1997). Also in line with this view is the argument that increased local density typical of institutionally well-developed locations heightens competitive pressures, which in turn can increase subsidiary exit (Miller and Eden, 2006).

Second, literature on the performance persistence of MNE affiliates operating in emerging market (Chacar and Vissa, 2005; Chacar *et al.,* 2010) indicates that foreign subsidiaries tend to persist even in the face of poor performance because of (a) the understanding by MNE management of the relatively greater challenges of operating in emerging markets and thus a correspondingly greater allowance for substandard performance (i.e., strategic explanation); (b) the tendency for MNE managers to persevere with short-term losses and stay the course in the hope of developing experience and gradually building share, local identity, and useful political connections (Chacar and Vissa, 2005)(i.e., evolutionary/path-dependence explanation); and (c) the tendency to avoid the stigma associated with failing in emerging markets (i.e., behavioural explanation).

The potential implications of institutional voids/instability for the exit probability of foreign subsidiaries is likely to depend on the balance between associated economizing challenges and strategizing opportunities. Williamson (1991) observed that economizing is much more fundamental than strategizing and that strategizing benefits seldom prevail in the presence of significant cost

[1] We thank an anonymous reviewer for suggesting this mechanism.

burdens in production, distribution, and organization. Teece et al., (1997) echo this view by arguing that organizing effectively and efficiently to identify and embrace opportunities is more fundamental to value creation and capture than seeking market power through such actions as raising rival's costs and excluding new entrants. As well, economic rents in the strategizing (positioning) approach are monopoly rents (Teece et al., 1997), which are available only to a limited range of firms/subsidiaries and difficult to sustain in such dynamic institutional settings as those in most African countries. Thus we contend that:

> ***Hypothesis 1:*** *MNE subsidiaries entering the African market face a greater likelihood of exit than their counterparts entering the OECD market (the economizing mechanism is more potent than the strategizing mechanism).*

Empirical testing of this hypothesis can only indicate which of the two countervailing mechanisms (i.e., economizing and strategizing) dominate in the context of MNE investment in Africa. Consideration of relevant boundary conditions is thus needed to gain a more refined understanding of the dynamics between these mechanisms and the corresponding implications for the exit likelihood of subsidiaries. MNE-and/or subsidiary-level strategies can help mitigate institutional hazards and/or harness market power opportunities, thus influencing subsidiary exit likelihood (Delios and Henisz, 2000; Luo, 2002; Santangelo and Meyer, 2011). Here, we consider two such strategies: *investment purpose diversity* and *market-seeking orientation*.

Investment Purposes Diversity

Successful investments in uncertain environments require an understanding of the environment and associated dynamics (Miles and Cameron, 1982). The investment strategy to be used can reflect such understanding and preparation, or the absence thereof. One essential issue in the strategy formulation process is specifying the intended purpose(s) of the investment. Clearly, investment purposes are context dependent in that different investment locations and environments may be

suitable for achieving different purposes. For instance, an environment suitable for advancing a *research and development* purpose may not be suitable for achieving a *market access* purpose. Likewise, some environments may be conducive for pursuing both of the purposes mentioned above, while some may not be suitable for any of the purposes.

Discussion of investment purposes has featured in prior literature on investment motives. Dunning (1998), for example, elaborated on four major motives that drive MNE investments. We consider each in turn. The *resource-seeking* motive explains FDI in search of a resource that is not available in the home country or relatively cheaper in the foreign country. Investments in resource-endowed countries are likely to be motivated by a desire to access such resources. The *efficiency* motive is pursued by a firm looking to secure decreased production costs and scale and/or scope economies. The *market-seeking* motive entails efforts to serve a market in the host country or in nearby regions. It also may involve reducing the transportation cost component to ensure better price competitiveness in the host country. The *strategic asset seeking* motive involves acquiring a new technological base. A related line of research has extended our understanding of subsidiary heterogeneity by providing evidence suggesting that subsidiaries can have diverse purposes, possibly spanning across multiple categories (Birkinshaw and Hood, 1998).

Drawing on the investment motives literature and acknowledging that foreign subsidiaries may have diverse investment purposes can generate unique insights about subsidiary scope, its interaction with institutional environments, and its performance implications. The number and relatedness of purposes a subsidiary is expected to achieve in the host country determines its activities and thus its scope. Also, investment purposes specify the rationale for a move to a given market and define the behavior and orientation of the focal subsidiary (Nachum and Zaheer, 2005). Virtually every

decision regarding the subsidiary, including one on entry mode choices, is likely to be influenced by the selected investment purpose(s) (Franco, Rentocchini, and Marzetti, 2010).

In general, adaptation and learning are essential elements of operating in such emerging markets as Africa; having diverse purposes can foster both. Following Thompson (2011) we argue that, under the norms of bounded rationality, firms entering environments fraught with uncertainties seek ways to buffer their technical core or infuse in their structures elements that help in adapting to changes. In the context of MNEs, we contend that having diverse purposes for a subsidiary makes possible *resource reallocation*, which refers to the reassignment over time of resources from deteriorating areas/activities to more promising ones (Adner, 2007; Klingebiel and Adner, 2015). In fact, Adner (2007) argued that existing work on flexibility has disproportionately focused on what he calls 'flexibility as a redirection of activity' (redirecting activities across subsidiaries in response to environmental changes) and suggested that future research explores 'flexibility as reassignment of resources' (shifting resources to a more favourable activity in a subsidiary). Subsidiaries with diverse purposes have the option to abandon an investment purpose and reassign resources to more attractive others (Adner, 2007) and the value of such option is greater in emerging markets characterized by missing/unstable institutions.

Institutional voids tend to limit the flexibility of organizations operating in them (Santangelo and Meyer, 2011). As such, MNEs entering markets with high institutional voids may need to deploy mechanisms that help them secure flexibility which the environment does not provide. A simple syllogism may clarify: Flexibility is essential when operating under institutional voids (Khanna and Palepu, 1997); such environments limit flexibility (Santangelo and Meyer, 2011); therefore, it is incumbent on the firm to devise its own mechanism of flexibility. We argue that one such mechanism is having diverse investment purposes. An MNE subsidiary with diverse investment

purposes can better respond to changes in, for example, government regulations as resources can readily be reconfigured to focus on a purpose least affected by the change or to revise resource allocations among the functions/activities targeted at the purposes.

Furthermore, entering emerging markets with diverse investment purposes can promote exploration, which in turn can facilitate learning about the business environment, experimenting with different activities, and understanding what works and what does not (Sorensen and Stuart, 2000). Subsidiaries having diverse investment purposes are likely to develop a better understanding of the host-country environment and build useful connections because of their potential exposure to different markets/industries and interactions with different host-country partners (Hashai *et al.*, 2010). The global strategy literature on business groups points to a diversification premium when operating in emerging markets (Khanna and Palepu, 2000), a finding leading to the institutional-based theory of corporate diversification which posits that diversified firms overcome market imperfection prevalent in emerging markets (Khanna and Palepu, 2000; Wan, 2005; Wan and Hoskisson, 2003; Peng *et al.*, 2005). Following similar logic, we contend that subsidiary level diversification—in the form of purpose diversity—can help mitigate the hazards and/or expand the opportunities of conducting business in locations of high institutional voids. We, therefore, posit the following hypothesis:

> ***Hypothesis 2***: *Investment purpose diversity negatively moderates the relationship between entry to Africa by an MNE subsidiary and its exit likelihood such that it weakens or reverses the positive relationship described by H1.*

Market-seeking Orientation

Foreign investments with greater market-seeking orientation are undertaken to serve the host-country (and at times, regional) markets through local production and distribution of goods/services, rather than exporting from the home country or other third countries (Dunning,

1998; Nachum and Zaheer, 2005). Unlike their counterparts, foreign subsidiaries with greater market-seeking orientation are more loosely coupled with their parent MNE and sister subsidiaries. They often play a more limited role in the global value-chain process than, for example, resource-seeking subsidiaries and are more locally responsive to the tastes and needs of their actual and potential customers (Slangen and Beugelsdijk, 2010). This attribute of market-seeking subsidiaries provides them with greater learning opportunities and an enhanced ability to fill institutional voids.

Out of the desire to serve local markets emerges the need for greater local embeddedness of subsidiaries with greater market-seeking orientation. Such embeddedness, in turn, enables the subsidiary to have greater exposure to the host market and to build important ties and networks with relevant host-country stakeholders (Slangen and Beugelsdijk, 2010). As a result, the subsidiary is likely to garner relevant host-country knowledge, which may prove useful in mitigating the adverse effects of institutional voids. Likewise, the connections established and the familiarity developed can make it easier for such subsidiaries to more easily access and more successfully work with local intermediaries. Also, in response to adverse institutional conditions in the host country, MNEs may relocate their subsidiaries. However, the need for greater local embeddedness of market-seeking subsidiaries makes it difficult to exercise this option[2].

Moreover, because market-seeking subsidiaries usually act as standalone units (operationally less integrated with the parent MNE as well as sister subsidiaries), adverse conditions in the host-country institutional environment are less likely to directly affect the parent MNE and sister subsidiaries. As a result, parent MNEs are more likely to tolerate poor performance of market-seeking subsidiaries than other kinds of subsidiaries. Subsidiaries with (natural) resource-seeking orientation, for example, tend to be a part of their respective parents' supply-chain and thus have operations closely

[2] We thank an anonymous reviewer for this suggestion.

synchronized with those of the parent MNEs and 'sister' subsidiaries (Nachum and Zaheer, 2005). As a result, when adverse institutional conditions affect the focal subsidiary, the parent MNE and associated sister subsidiaries are likely to feel the effects, prompting the MNE to terminate the focal subsidiary. The foregoing arguments, therefore, lead to the following hypothesis:

Hypothesis 3: *The level of market-seeking orientation negatively moderates the relationship between entry to Africa by an MNE subsidiary and its exit likelihood such that it weakens or reverses the positive relationship described by H1.*

RESEARCH DESIGN

Research Context

The last decade has seen a rapid surge in the economic development of Africa, attracting the attention of investors. In 2012, the continent registered a 5 percent increase in its FDI inflows while the global FDI inflow decreased by 18 percent (UNCTAD, 2013). A possible factor behind such a difference is the higher average rate of return for foreign investment made in the continent. In fact, the rate of FDI return is higher in Africa than in any developing region of the world (Leke *et al.*, 2010).

In spite of such progress and promising prospects, the continent is still fraught with systemic challenges with performance implications for MNEs operating there (Chrysostome and Lupton, 2011). Most, if not all, of the challenges are related to the paucity of effective institutions. Also, many African countries are characterized by a high degree of political instability and a lack (or absence) of rule of law (Azzimonti and Sarte, 2007). Similarly, ineffective financial institutions and inadequate regulatory infrastructures give rise to unstable macroeconomic environments, which in turn lead to high uncertainty and greater perceived risk of investment (Asiedu, 2002).

Our use of the African context was motivated by several reasons. First, by focusing on the African context, we attempt to respond to a call for a greater focus of global strategy research on emerging

economies whose institutional environments are completely different from those of developed economies, not just in their basic natures but also in the way they influence organizational behavior and performance (e.g., Hoskisson *et al.*, 2000; Khanna *et al.*, 2005; Peng *et al.*, 2008). In fact, such distinction has been made even among emerging economies in that economies such as those in Africa have considerably higher levels of institutional voids/instability and thus merit separate consideration (Hoskisson *et al.*, 2013). Also, the relevance to developing countries of conventional management theories—especially those concerned with the relationship between organizations and contexts—has been questioned (Kiggundu, Jørgensen, and Hafsi, 1983) and calls for a contextualization of international business (IB) theories have been made (e.g., Welch *et al.*, 2011). In fact, the issue of context and how it relates with MNE performance and behaviour is fundamental in IB scholarship (Shenkar, 2004; Vernon, 1994). The distinct institutional context of African countries, thus, presents an ideal setting to better understand international business and strategy in a market where institutions are weak and/or unstable.

Second, Africa's economic momentum and future growth prospects have attracted unprecedented levels of FDI activity (UNCTAD, 2013). Indications are that this trend is set to continue. Clearly, along with such increased activity and focus on the continent comes the need for a better understanding of the economic and institutional realities not just in the continent but in each country as well. Recognizing this need, the Academy of Management (AOM) launched the AOM Africa Initiative in 2011, issued a Call for Papers on management topics related to Africa, and held its first global conference in Africa in January, 2013.

Third, despite an increasing interest in research about emerging economies, high quality research in such contexts has paid very limited attention to Africa (Kolk and Lenfant, 2010; Zoogah *et al.*, 2015). Even from the limited research examining issues in the continent, a significant portion concerns

issues of corporate social responsibility and most use country-level, macro indicators which provide but a telescopic view of situations on the ground. Such a shortage of empirical work about Africa is more troubling for IB whose main unit of analysis is MNEs operating across countries and regions. This study, thus, looks to address the aforementioned gap and take a modest step toward bringing more scholarly attention to Africa.

Data and Sample

To test our hypotheses, we use a longitudinal data of Japanese overseas investments in Africa obtained from the Toyo Keizai (TK) dataset. The dataset is based on an annual survey of general managers of Japanese overseas subsidiaries throughout the world. This dataset is ideal to test our hypotheses for several reasons. First, the longitudinal nature of the data is useful not only in increasing our confidence in the results and underlying causal arguments (Bono and McNamara, 2011), but also in conducting survival analysis, which require data on multiple points. Second, it contains a fairly comprehensive data on foreign investment activities in Africa, a region largely missing from the mainstream global strategy research in part due to the lack of access to reliable data (Hoskisson *et al*., 2000). Third, Japan has been one of the major home countries for outward foreign investment throughout the world.

To achieve our empirical purpose, we extracted data on Japanese multinational subsidiaries operating in Africa. We then went through some essential data screening and cleaning. Also, to ensure that our study focuses on FDIs with significant foreign investment, we followed Beamish and Inkpen's (1998) suggestion and limited our sample to subsidiaries having at least 20 employees. Also, Following Woodcock, Beamish, and Makino (1994), we restricted our sample to those subsidiaries that were at least two years old to consider only those subsidiaries that reached an initial period of stabilization. These procedures resulted in a final sample of 126 Japanese subsidiaries operating

across 28 African countries, extending over 19 years (1990-2008), and constituting 998 subsidiary-year cases. We obtained data about relevant parent-level factors from the Nikkei-NEEDS dataset.

Understanding the exit implications of entry to the African market is complicated because of the inherent self-selection bias. To account for this concern, we identify a control (counterfactual) sample of comparable subsidiaries operating elsewhere. Accordingly, we decided to identify matching subsidiaries operating in OECD countries to ensure enough variability in the characteristics of business/institutional environment between the 'treated' (i.e., African subsidiaries) and the 'control' subsidiaries (i.e., OECD subsidiaries). We employed the PSM procedure to identify matching control subsidiaries (Dehejia and Wahba, 2002). We first compiled a comprehensive list of subsidiaries operating in 29 OECD countries. We then pooled these subsidiaries with the treatment subsidiaries and fitted a probit model by using subsidiary size, subsidiary age, foreign ownership ratio, the number of foreign parents, parent size, and parent R&D intensity to predict the propensity of a subsidiary to enter Africa. Using the estimated propensity score, we identified 123 control subsidiaries matching the 126 treated subsidiaries. These 123 control subsidiaries are spread across 10 OECD countries. Three of the treated subsidiaries share matching subsidiaries with other three treated subsidiaries. We retained these subsidiaries in our final sample (per Dehejia and Wahba, 1999). Our final sample includes 249 subsidiaries.

To verify the success of our matching procedure, we conducted two sets of tests. First, as reported in Table 1, we ran t-test of means on the covariates used to develop the matching model. Results show no statistically significant differences between the means. Second, we conducted a probit regression using the sample of 249 matching subsidiaries to predict the probability of entering the African market. As shown in Table 1, estimates for the covariates used in the matching model are insignificant, indicating that our matching process was reasonably sound. The use of the PSM

technique provides for a more randomized sample of subsidiaries with counterfactual cases, thus helping address potential endogeneity concerns (Reeb *et al.*, 2012).

Insert Table 1 about here

Variables

As with any survival analysis, our dependent variable is made up of two components. The first represents the length of time in years a subsidiary takes to cease operation or to be right-censored (i.e., not cease operation within the time frame of the analysis). In our model, this is a random variable, whereas the censoring time is fixed to the year 2008. The second component is an exit indicator given by the following function.

$$\delta_i = \begin{cases} 1 \ \ if \ T_i \leq U_i \\ 0 \ \ if \ T_i > U_i \end{cases} \quad \ldots\ldots\ldots\

decision with a dichotomous variable assuming a value of '1' for subsidiaries entering Africa and '0' for those entering any of the OECD countries included in our sample. Here, we make a reasonable assumption that at the start MNEs need to confront a strategic decision of either to enter the African market or not to. Such a regional orientation of MNE location decision is consistent with the theoretical and empirical evidence underlying the regionalization/semi-globalization literature in IB (e.g., Arregle *et al.*, 2013, Rugman and Verbeke, 2004).

In order to observe the differences in institutional environments of the two broad investment destinations (i.e., Africa and OECD), we compiled data on the levels of *institutional voids* and *institutional instability*. We use the *Heritage Foundation Index of Economic Freedom* measures to establish the level of institutional voids (Kane, Holmes, and O'Grady, 2007). The index aggregates measures on multiple aspects of economic freedom. It is a time series data providing indices from 1995 onwards. We followed Dikova and van Witteloostuijn's (2007) approach and used the 1995 score for the years between 1990 and 1994 inclusive. The index can assume values ranging from zero to 100, higher values indicating better overall economic freedom. We subtracted from 100 the values on this index to develop our *institutional voids* variable so that higher values indicate greater institutional voids. We measured *institutional instability* using the POLCON measure of political constraints that captures the distribution of power across the legislative, executive, and judicial branches of government to provide an estimate of how difficult it is for host government to change the rules of the game in a way that adversely affects the interest of the foreign subsidiaries (Henisz, 2000).

Investment purpose diversity. We use this variable as a moderator in our model, and it was developed out of the TK dataset using the following procedure. Our theoretical argument suggests that having multiple purposes provides adaptability/flexibility advantage in response, for example, to unexpected policy change. Nonetheless, the degree of relatedness between or among the purposes is

also important in determining the feasibility of adaptation. A concept in the real options perspective called the *subadditivity of option portfolios* holds that options which are within a given category or affected by the same environmental factors have lower value in managing uncertainty than more diverse options (Belderbos, Tong, and Wu, 2014); that is, when one purpose is affected, the others will also be so, limiting the opportunity for the subsidiary/firm to redirect its focus and stay in operation (i.e. less ability for resource reallocation). However, a subsidiary with multiple, unrelated purposes is less likely to see all of its purposes adversely affected by a policy change. As a result, in response to a policy change that makes a purpose less attractive, such subsidiary can reconfigure its resources to focus on the purpose(s) not(less) affected by the policy change.

Therefore, it is essential that the variable we develop contains information about both the number of purposes a subsidiary performs as well as the degree of relation between or among those purposes. We used the following procedures to develop this variable. First, we identified investment purposes of each subsidiary as specified by the respective general managers. Next, using Dunning's (1998) classification of investment motives, we categorized the investment purposes into four categories: resource seeking, efficiency seeking, market seeking, and strategic-asset seeking. We also include a fifth category for other investment purposes that are not specified in our data. We consulted the investment motives and the subsidiary mandate (charter) literature and obtained feedback from three colleagues in classifying the purposes along the motive categories. We use these categories to decide on the relatedness of purposes. That is, purposes that fall into two different categories are considered unrelated. Table 2 presents the frequency distribution of the investment purposes and motive categories used in this study. We then adopted the widely-used *entropy* measure to calculate purpose diversity scores for each subsidiary. The mathematical function used to calculate the *investment purpose diversity* is as follows:

$$PD = \sum_{i=1} P_i \ln(1/P_i) \quad \ldots\ldots\ldots\

Delacroix, 1982). As subsidiary size has been shown to influence exit (Moulten and Thomas, 1993), we controlled for it using the log of number of employees as its proxy. This variable is time-variant and can also proxy for many subsidiary characteristics, such as the extent of local linkages, economies of scale, and importance within intra-firm and external networks (Yang, Mudambi, Meyer, 2008). Dhanaraj and Beamish (2004) found a statistically significant relationship between foreign ownership level and subsidiary exit probability. Therefore, we controlled for it by using the combined percentage of equity ownership of the foreign partners in the focal subsidiary. We also controlled for sector effect by introducing two dummy variables for three sector groups namely, primary, secondary, and tertiary.

We also included parent-level controls to account for alternative explanations of subsidiary exit arising from parent affiliation. Makino and Beamish (1998) found that the presence of multiple foreign partners increases managerial complexity, thereby influencing exit. As such, we control for the number of foreign partners listed as parents of the focal subsidiary. We controlled for parent size and used log of the combined number of employees of the parent companies as its proxy. The parent size variable is time-variant. Intangible assets of the parent is related to the exit probability of its subsidiary (Delios and Beamish, 1999) As such, we included a parent-level research and development (R&D) intensity variable. This variable is measured as a ratio of R&D expenditure to the total sales.

To control for the effects of time and periodic crisis on the exit probability of subsidiaries, we used the *strata* option in *stcox* estimation in STATA version 14. As a result, we specified baseline hazard of the model to each stratum of three periods namely, 1990-1995, 1996-2001, and 2002-2008. By so doing, we minimize the effect of unobserved heterogeneity among periods on the exit probability of subsidiaries. The specified baseline hazard adjusts for such extraneous periodic events as the Asian

financial crisis that occurred in the 1996–2001 period in our model and that influenced investments from Asian countries, including Japan. We also introduce host-country fixed effects to account for unobserved heterogeneity among the countries that may explain differences in the exit probability of foreign subsidiaries.

Statistical Method

To test the hypotheses, we employed an extended Cox regression model (Kleinbaum and Klein, 2005). It can help estimate the parameters without the need to make any assumptions about the underlying hazard distribution. The model develops a hazard function used to determine the probability that a subsidiary experiences an event (i.e., exit), given it has survived up to time *t*. The hazard function that is denoted by $h(t, X(t))$ is as follows:

$$h(t, X(t)) = h_0(t) \exp^{[\sum_{I=1}^{P_1} \beta_i X_i + \sum_{j=1}^{P_2} \delta_i X_j(t)]} \quad \text{..... (3)}$$

$h_o(t)$ represents the baseline hazard function that is left unspecified and reflects the underlying hazard rate when the values of all covariates $X_1,\ldots Xp_1$ and $X_{1(t)},\ldots X_{p2(t)}$ equal to 0. $X(t)$ stands for the variables in the model and X_i denotes the i^{th} time-independent variable, while $X_j(t)$ the j^{th} time-dependent variable. β_i's and δ_j's denote their corresponding coefficients. The extended Cox regression model accommodates the use of time-variant covariates (Kleinbaum and Klein, 2005) and produces a hazard ratio associated with each explanatory variable, along with corresponding confidence interval estimates.

RESULTS

Table 3 describes the data and provides useful statistic for subsidiaries operating in Africa and those in the OECD countries. The greater subsidiary years to subsidiary cases ratio for subsidiaries

operating in OECD countries than those in African countries suggests that on average subsidiaries survive longer in the former than in the latter. This finding is also supported by the greater median number of years for the OECD subsample. The median time represents a parameter estimate for the number of years it takes for 50 percent of the subsidiaries to experience the event (i.e., exit). Relatedly, the hazard rate among African subsidiaries appears to be greater and we used the log-rank test to examine whether there is a statistically significant difference between the exit rates between the two subsamples. The result shows a statistically significant difference in the exit rates of subsidiaries in the two subsamples ($\chi^2 = 7.25$, $p < 0.01$), suggesting that African subsidiaries face a greater hazard rate.

Insert Table 3 about here

Table 4 presents a correlation matrix on all the variables used in our model as well as the institutional voids and instability variables. The correlations between all of the variables in our model are low and thus multicollinearity was not a concern. We ran a collinearity diagnostic on all the variables using the variance inflation factor (VIF) method. The calculated VIF scores for all the variables are below 5, indicating that multicollinearity is not an issue. To validate our baseline assumption that the African market has a significantly different institutional environment from the OECD market, we introduced the institutional voids and institutional instability variables. The high, positive correlation between these variables and the treatment variable is consistent with our expectation. As shown in Table 3, the African group faces significantly higher institutional voids ($t = -76.72$, $p < 0.001$) and institutional instability ($t = -53.75$, $p < 0.001$) than the OECD group.

Insert Table 4 about here

Since our response variable is subsidiary exit and our model includes a time-variant covariate, we used extended Cox regression to test our hypotheses. The partial likelihood procedure is employed

to estimate regression parameters. We followed the estimation procedures outlined in Singer and Willet (2003). Table 5 presents results from our tests. Our analyses resulted in five models. First we fit the full model (i.e., Model 5), which includes all the variables and interaction terms. We then tested for the significance of our interaction and main effects by dropping one or more variables from the full model and comparing the log-likelihood of each nested model to that of the full model. We use the resulting Chi-square statistic to determine the significance of the variables or interactions excluded from the full model. Model 4 excludes the interaction term between the entry to Africa variable and market-seeking orientation; whereas, Model 3 excludes the interaction term between the entry to Africa variable and purpose diversity. Model 2 excludes the interaction terms as well as the moderating variables. Model 1 further excludes the main effect.

Insert Table 5 about here

Model 1 is the most reduced model in which the treatment variable (i.e., entry to Africa) is also excluded. The corresponding Chi-square statistic resulting from comparing the log-likelihood of Model 1 and the full model indicates that the full model which includes the entry to Africa variable is superior to the reduced model ($\chi^2 = 17.20$, $p < 0.001$). A significant regression coefficient for the treatment variable in Model 5 provides support for *H1 (*β=1.366, $p < 0.01$*),* suggesting that entry to Africa subjects Japanese subsidiaries to increased hazard. The *beta* coefficient corresponds to a hazard ratio of around 3.92[3], suggesting that Japanese subsidiaries that enter the African market have a 292[4] percent higher chance of exiting at time t than those that enter the OECD market. Figure 1 shows the estimated hazard of Japanese subsidiaries operating in OECD countries and those in African countries.

[3] The hazard ratio is calculated as e^{β}, interpreted as a percentage of change in hazard probability for 1% change in the explanatory variables. Caution need to be exercised when applying such interpretation for log-transformed variables as the changes are in log-transformed terms.

[4] The percentage is determined by subtracting 1 from the corresponding hazard ratio.

Insert Figure 1 about here

Our second hypothesis presents a moderation effect of purpose diversity on the relationship between the strategy of entering the African market and exit probability. Model 3 provides estimates of parameters useful in testing this prediction. We find that exclusion of this interaction effect from the full model results in an inferior model, suggesting that the interaction term is a significant predictor ($\chi^2 = 4.51$, $p < 0.05$). The negative, statistically significant beta coefficient of the interaction term supports our prediction in Hypothesis 2 ($\beta = -0.631$, $p < 0.05$). This result suggests that greater purpose diversity weakens the positive relationship between entry to Africa and exit likelihood. To gain further insight into the interaction effect, we plotted the result in Figure 2. As shown in the figure, when purpose diversity is high, entry to Africa is associated with a reduced likelihood of exit. That is, Japanese subsidiaries with high purpose diversity are less likely to exit the African market than those with low purpose diversity. Also, we follow Aiken and West (1991) to test simple slopes at high (1SD above the mean) and low (1SD below the mean) values of purpose diversity. The slopes when purpose diversity is high and low are both significantly different from zero ($\beta=0.512$, $p<0.01$ and $\beta=1.370$, $p<0.01$, respectively), confirming our results.

Insert Figure 2 about here

Model 4 presents results for a test of H_3, which predicts a negative moderation effect of the *market-seeking orientation* variable on the relationship between the entry of a subsidiary to Africa and its exit likelihood. In line with our expectation, comparison of log-likelihood Model 4 with that of Model 5 suggests that exclusion of the interaction term of entry to Africa and market-seeking orientation results in a Chi-square statistic that is marginally significant ($\chi^2 = 3.38$, $p < 0.1$). Hypothesis 3 is marginally supported ($\beta = -0.292$, $p < 0.01$), such that, from Japanese subsidiaries entering into the African market, those with a greater market-seeking orientation have a lower exit probability than

their counterparts. Figure 3 shows this moderation effect in which high market-seeking orientation lowers the greater exit rate associated with entry to Africa. We also conducted simple slope tests at high and low levels of the market-seeking orientation variable. The effect of entry to Africa on exit likelihood is significantly different from zero for both levels ($\beta = 1.400$, $p < 0.01$ and $\beta = 1.202$, $p < 0.05$ at low and high levels respectively).

Insert Figure 3 about here

DISCUSSION AND CONCLUSION

Two of the three core areas in IB are MNEs and comparative national business systems (Shenkar, 2004; Vernon, 1994). MNEs exist in virtually every country in the world, where they face different national business systems. While emerging markets have been an area of growing scholarly interest (Wright *et al.*, 2005), the focus of studies on such markets has been limited to select countries and regions, with regions such as Africa largely underrepresented (Xu and Meyer, 2012). A better understanding of these regions and their institutional environments no doubt advances our appreciation of emerging markets on a number of fronts, not least of which is on how MNEs deal with associated institutional voids and the performance implications of their actions.

From our descriptive analysis, we find that Japanese subsidiaries entering the African market have a lower median life of nine years compared to 11 years for those entering the OECD market. While this indicates the increased hazard of subsidiaries operating in Africa, the relatively smaller than expected difference in the median years suggests that institutional challenges facing subsidiaries operating in Africa may to a certain extent be offset by the decreased competitive pressures of operating there. Also, as expected, the levels of institutional voids and institutional instability facing subsidiaries entering the African market are significantly greater than those facing subsidiaries

entering the OECD market. These two variables are central to the increased levels of uncertainty facing subsidiaries operating in Africa (Zoogah *et al.,* 2015).

Results with regard to our first hypothesis provides support to the exit implications of MNEs' location decisions. We find that, on average, the strategy of entering the African market is associated with greater exit likelihood. Our paired-sample design presented counterfactual cases of Japanese foreign subsidiaries making the alternative decision (i.e., entry to the OECD market), thus providing greater confidence in building causal arguments between the location strategy and exit likelihood. Our finding is consistent with several recent studies suggesting the economizing challenges of operating in Africa (Hochberg *et al.*, 2015; UNCTAD, 2015).

Our findings regarding the first hypothesis generates several important insights. First, our comparison of subsidiary exit probabilities across two broad, disparate groups of investment locations illustrate the effects of context on the long-term performance (or exit) of MNE subsidiaries. By doing so, we bring attention to comparative national business systems (Shenkar, 2004; Vernon, 1994). In fact, Shenkar (2004) has urged scholars to investigate the potentially disparate influences of business environments at different investment locations. A similar call has been made to look into the contextual boundary conditions of IB theories and develop a richer understanding of the interplay between context and business performance (Welch *et al.*, 2011).

Second, our results shed some light on the economizing and strategizing implications of institutional voids/instability. Whereas investment in the OECD market benefits from the highly developed institutional environments that reduce market imperfections and promote efficient operations (i.e., economizing benefits), it is also subjected to more intense competitive pressures as entry barriers are largely limited and market power mechanisms such as collusive behaviours are largely discouraged (i.e., strategizing challenges). In contrast, institutional voids characterizing the African environment

diminish imitative and competitive pressures and make for rather easier development of market power (North, 1991). Our findings suggest that, in the African market, the economizing downsides of institutional voids/instability are, on average, more potent than the associated strategizing opportunities in determining the exit probability of Japanese foreign subsidiaries. That is, in such regions as Africa, the challenges arising from the lack (absence) of market supporting institutions outweigh the benefits of decreased competitive intensity. This finding is consistent with and provides empirical evidence for the notion that economizing is more fundamental than strategizing (Teece *et al.,* 1997; Williamson, 1991).

Test of our second hypothesis provide a more nuanced understanding of the relationship between entry to Africa and exit likelihood. Results indicate that entry to Africa is related to a lower exit likelihood for subsidiaries with high purpose diversity. Our theoretical arguments in support of this finding suggest that subsidiaries with diverse investment purposes can benefit from enhanced abilities of adaptability and learning, which are crucial when operating in such dynamic and institutionally less-developed locations (Jackson, 2004; Teece *et al.*, 1997). Subsidiaries with less diverse purposes are more susceptible to adverse changes in the environment (Belderbos *et al.*, 2014), limiting their ability to redirect focus and remain in operation. However, for subsidiaries with more diverse purposes, it is less likely for an environmental change that affects one of the purposes to also affect the other; hence, in such a situation, these subsidiaries can remain viable by redeploying more of their resources and attention to the purpose that is not adversely hit by the change. From a real options perspective, such advantage is termed a *flexibility option* as it fosters managerial flexibility to switch between purposes in response to new information (e.g., Chung *et al.*, 2010; Reuer and Leiblein, 2000).

Subsidiaries that enter locations like Africa with diverse investment purposes are also in a better position to respond to or fill institutional voids. Extant research on diversity acknowledges that as well as the benefits it confers, it has several downsides. Included in the possible downsides of diversity are (a) growing strain on management to manage different purposes and deal with uncertainty along different environmental domains/markets (Grant, Jammine, and Thomas, 1988); b) increased coordination cost; and c) inefficiencies from conflicting 'dominant logics'(Markides, 1992). Diversity, therefore, makes economic sense only to the extent that its drawbacks are more than offset by its benefits (Williamson, 1985). The institutional-based view of diversity suggests that the extent to which diversity offers net-benefit is contingent on institutional factors, such that in locations where market-supporting institutions are missing, diversity offers considerable benefits (Khanna and Palepu, 1997; Wan, 2005; Wan and Hoskisson, 2003; Peng *et al.*, 2005). Our finding not only offers an additional support to the institutional-based view of diversity, but also extends our understanding by introducing the notion of within-subsidiary diversity.

By looking at the phenomenon of within-subsidiary diversity (of purposes) and its interaction with institutional conditions to affect subsidiary exit, we are advancing the notion of *subsidiary scope* and its implications. Prior research in global strategy has largely focused on scope at the firm level (e.g., Peng *et al.,* 2005). Diversification has, therefore, been considered in a limited way whereby the firm operates multiple strategic business units (or subsidiaries) potentially across different industries and/or institutional environments. The subsidiary scope notion we are advancing, however, responds to the need to gain better understanding of the heterogeneity of MNE subsidiaries. Some subsidiaries discharge a broad range of responsibilities –for example, production, marketing, and central R&D for product development—whereas, others perform just a single activity (e.g., manufacturing) (Birkinshaw and Hood, 1998). This study also contributes to a better understanding of not just subsidiary scope, but its implications on foreign subsidiary exit as well.

Adner (2007) raised the notion of *flexibility as reassignment of resources*, noting that existing treatments of flexibility have largely focused on *flexibility as redirection of activity* and future research needs to look at flexibility through reallocation of resources. Similarly, treatments of flexibility in global strategy research have emphasized the flexibility advantage from shifting value-chain activities from a country experiencing adverse changes to a more favourable country within the MNE's network (Belderbos and Zou, 2007; Chung *et al.*, 2010). Whereas case studies suggest that MNEs such as GM and Qantas engage in reallocation by releasing resources from existing activities and redeploying them to new opportunities (Maitland and Sammartino, 2012), we identify investment purpose diversity as a potential lens through which to study such reallocations. More importantly, our research identifies investment purpose diversity as a possible response to institutional voids/instability, thereby (a) bringing to the fore a response mechanism that has received less attention and (b) engaging a response that reflects the strategic decision making of MNEs when investing in emerging markets.

The result of our third hypothesis suggests that the kind of purpose a subsidiary emphasizes also matters. In particular, we find that when operating in institutionally weak/turbulent regions, subsidiaries with greater market-seeking orientations have a lower exit probability than their peers. We argue that the structural difference between market-seeking subsidiaries (i.e., less globally integrated and more locally responsive) and their counterpart is responsible for the differential exit rates. In particular, being less globally integrated makes it possible for the parent MNE to tolerate adverse changes in the host country of the focal subsidiary because such adverse change is less likely to affect the parent MNE and sister subsidiaries (Slangen and Beugelsdijk, 2010). Also, being more locally responsive facilitates the building of ties and networks with important local stakeholders, thereby fostering a better access to intermediaries and greater understanding of the host-country

environment. Such access and knowledge can help market-seeking subsidiaries to more successfully operate in locations of institutional voids.

From a measurement standpoint, our use of the market-seeking orientation variable makes two important contributions. First, unlike previous research which has used proxies—such as whether a subsidiary sells to unaffiliated customers or affiliated customers (Slangen and Beugelsdijk, 2010)—to determine whether or not a subsidiary is market-seeking, our approach of looking at the specific investment purposes to identify market-seeking subsidiaries is not only straightforward but also likely to provide a more accurate picture. Second, our use of the term 'orientation' in our market-seeking orientation variable reflects the reality that subsidiaries may have a diverse portfolio of purposes, which can include purposes falling into more than one category. The market-seeking orientation, thus, measures the proportion of a subsidiary's purposes falling into the market-seeking category, allowing us to determine whether a subsidiary has more market-seeking orientation than another subsidiary. Our results regarding investment purpose diversity and market-seeking orientation thus contribute to the global strategy literature by reemphasizing past attention to an important aspect of MNEs investments—investment purpose. The measures we have introduced can inform future research in the area.

For practitioners, our empirical evidence suggests that investments in Africa have a higher probability of exit than those in OECD countries. Given the rather paradoxical anecdotal evidence and reports regarding both the merits and hazards of entering the African market, our findings provide some clarity. The crux of our study, however, is about how subsidiaries can mitigate the hazards of operating in the African market. Accordingly, we find that subsidiaries with diverse investment purposes are in a better position to deal with institutional voids/instability in Africa and accordingly have an even lower chance of exit than their counterparts in the OECD market. Further,

subsidiaries entering the African market with a greater market-seeking orientation are more likely to develop local networks and build a better local knowledge base, thus lowering their exit likelihood.

We examined the robustness of our findings to variations in the study sample and model specification. Not all African countries have similar levels of institutional voids and institutional instability. To examine whether our results are driven by potential outliers in our sample, we reestimate our models for different sample compositions. To assess whether our result might be influenced by an unusual data distribution in one or more countries, we developed alternative paired-matches. We removed five countries with the lowest and highest average values for institutional voids and institutional instability variables and reran our models. While the values of our estimates did fluctuate, their signs and statistical significances remained unaltered. We also reran our models by replacing the entry to Africa variable by institutional voids and institutional instability variables. Once again, the results were consistent with our findings using the entry to Africa variable.

While it produced some useful insights, the study is not without limitations. The use of subsidiaries from only one country (i.e., Japan) may limit the generalizability of our findings to subsidiaries from other countries. In fact, the characteristics and behaviors of subsidiaries from different places, for example from developed countries and emerging countries, differs significantly (Wright *et al.*, 2005). As such, the study should be replicated using subsidiary and MNE data from other home countries. It should be noted, however, that our use of a single home country data served an essential statistical purpose of controlling for variance arising from home-country heterogeneity.

A viable extension of this work would be to look at how developments in the institutional conditions and competitive intensity across African countries influence the exit likelihood of subsidiaries and examine whether the moderating effects of investment purpose diversity and market-seeking orientation change accordingly. A growing number of African countries are

continuously liberalizing their economies, with new regulations replacing the old ones (McKinsey Global Institute, 2010). Also, MNEs from advanced countries are increasingly witnessing competition arising from emerging market MNEs, including those from Africa. It would be interesting to study the comparative pace of growth in the level of competition and institutional development and accordingly identify suitable strategies for better performance and survival. Further extensions and refinements are also possible with regard to the investment purpose diversity and the market-seeking orientation variables introduced in this paper. For example, as illustrated in the Appendix, the purpose diversity measure includes within-purpose diversity and between-purpose diversity. Future research needs to explore the potential contributions of each component with respect to adaptability and/or flexibility.

In conclusion, our study demonstrates that the strategy of entering the African market, on average, increases exit probability. However, subsidiaries with more diverse investment purpose and/or greater market-seeking orientation have a lower exit likelihood than their counterparts. In short, our study suggests that subsidiaries can mitigate the hazards of institutional voids/instability by having diverse investment purposes and/or greater market-seeking orientation.

REFERENCES

Adner R. 2007. Real options and resource reallocation processes. *Advances in Strategic Management*, ***24***(1), 363-372.

Aiken LS, West G. 1991. *Multiple Regression: Testing and Interpreting Interactions*. Sage: Newbury Park, CA.

Arregle J, Miller TL, Hitt MA, Beamish PW. 2013. Do regions matter ? An integrated institutional and semiglobalization perspective on the internationalization of MNEs. *Strategic Management Journal*, ***34***(March), 910–934.

Asiedu E. 2002. On the determinants of foreign direct investment to developing countries: Is Africa different? *World Development*, ***30***(1), 107–119.

Azzimonti M, Sarte PG. 2007. Barriers to foreign direct investment under political instability. *Economic Quarterly*, ***93***(3), 287–315.

Beamish PW, Inkpen AC. 1998. Japanese firms and the decline of the Japanese expatriate. *Journal of World Business,* ***33***(1): 35-50.

Belderbos R, Zou J. 2007. On the growth of foreign affilates: Multinational plant networks, joint ventures, and flexibility. *Journal of International Business Studies*, ***38***(7), 1095–1112.

Belderbos R, Tong TW, Wu S. 2014. Multinationality and downside risk: The roles of option portfolio and organization. *Strategic Management Journal*, ***35***(1), 88-106.

Birkinshaw J. 1996. How multinational subsidiary mandates are gained and lost. *Journal of International Business Studies*, 467-495.

Birkinshaw J, Hood N. 1998. Multinational subsidiary evolution: Capability and charter change in foreign-owned subsidiary companies. *Academy of Management Review*, ***23***(4), 773-795.

Bono J, McNamara G. 2011. From the editors publishing in AMJ — Part 2 : Research design. *Academy of Management Journal*, ***54***(4), 657–660.

Carroll GR, Delacroix J. 1982. Organizational mortality in the newspaper industries of Argentina and Ireland: An ecological approach. *Administrative Science Quarterly,* ***27***, 169-198.

Chacar A, Vissa B. 2005. Are emerging economies less efficient? Performance persistence and the impact of business group affiliation. *Strategic Management Journal*, ***26***(10), 933-946.

Chacar AS, Newburry W, Vissa B. 2010. Bringing institutions into performance persistence research: Exploring the impact of product, financial, and labor market institutions. *Journal of International Business Studies*, ***41***(7), 1119-1140.

Chan C, Isobe T, Makino S. 2008. Which country matters? Institutional development and foreign affiliate performance. *Strategic Management Journal,* ***29***(11): 1179–1205.

Chironga M, Leke A, Lund S, Van Wamelen A. 2011. Cracking the next growth market: Africa. *Harvard Business Review,* ***89***, 117–122.

Chrysostome EV, Lupton NC. 2011. Characteristics and performance of Japanese foreign direct investment in Africa. *International Journal of Economic Policy in Emerging Economies*, ***4***(1): 54-77.

Chung CC, Lee SH, Beamish PW, Isobe T. 2010. Subsidiary expansion/contraction during times of economic crisis. *Journal of International Business Studies*, ***41***(3), 500–516.

Collier P, Gunning JW. 1999. Explaining African economic performance. *Journal of Economic Literature,* ***37***(1), 64–111.

Dai L, Eden L, Beamish PW. 2013. Place, space, and geographical exposure: Foreign subsidiary survival in conflict zones. *Journal of International Business Studies*, ***44***(6), 554-578.

Dehejia RH, Wahba S. 1999. Causal effects in nonexperimental studies: Reevaluating the evaluation of training programs. *Journal of the American Statistical Association*, ***94***(448), 1053-1062.

Dehejia RH, Wahba S. 2002. Propensity score-matching methods for nonexperimental causal studies. *Review of Economics and Statistics*, ***84***(1), 151-161.

Delios A, Beamish PW. 1999. Ownership strategy of Japanese firms : Transactional, institutional, and experience influences. *Strategic Management Journal*, ***20***(February), 915–933.

Delios A, Beamish PW. 2001. Survival and profitability: The roles of experience and intangible assets in foreign subsidiary perfromance. *Academy of Management Journal*, ***44***(5), 1028–1038.

Dess GG, Beard DW. 1984. Dimensions of organizational task environments. *Administrative Science Quarterly*, 52-73.

Dhanaraj C, Beamish PW. 2004. Effect of equity ownership on the survival of international joint ventures. *Strategic Management Journal*, ***25***(3), 295–305.

Dhanaraj C, Khanna T. 2011. Transforming mental models on emerging markets. *Academy of Management Learning & Education*, ***10***(4), 684-701.

Dimaggio PJ, Powell WW. 1983. The iron cage revisited : Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, ***48***(2), 147–160.

Dunning JH. 1998. Location and the multinational enterprise: A neglected factor? *Journal of International Business Studies*, ***29***(1), 45–66.

Franco C, Rentocchini F, Marzetti GV. 2010. An analysis of the motives underlying Foreign Direct Investments. *Journal of International Business Law,* ***9***(1-2), 42-65

Ghemawat P, Del Sol P. 1998. Commitment versus flexibility? *California Management Review*, ***40***(4), 26-42.

Grant RM, Jammine AP, Thomas H. 1988. Diversity, diversification, and profitability among British manufacturing companies, 1972–1984. *Academy of Management Journal*, ***31***(4), 771-801.

Hashai N, Asmussen CG, Benito GR, Petersen B. 2010. Technological knowledge intensity and entry mode diversity. *Management International Review*, ***50***(6), 659-681.

Henisz WJ. 2000. The institutional environment for multinational investment. *Journal of Law, Economics, and Organization*, ***16***(2), 334-364.

Hochberg N, Klick J, Reilly E. 2015. What companies have learned from losing billions in emerging markets. *Harvard Business Review*. Available at https://hbr.org/2015/09/what-companies-have-learned-from-losing-billions-in-emerging-markets

Hoskisson RE, Eden L, Lau CM, Wright M. 2000. Strategy in emerging economies. *Academy of Management Journal*, ***43***(3), 249–267.

Hoskisson RE, Wright M, Filatotchev I, Peng MW. 2013. Emerging multinationals from Mid-Range economies: The influence of institutions and factor markets. *Journal of Management Studies,* ***50****(7)*, 1295-1321.

Jackson T. 2004. Africa and international management: Why bother? *AIB Insights,* ***4***, 6–8.

Kane T, Holmes KR., O'Grady MA. 2007. *Index of economic freedom*. Heritage Foundation: Washington, DC.

Khanna T, Palepu KG. 1997. Why focused strategies may be wrong for emerging markets. *Harvard Business Review*, ***75***(4), 41-51

Khanna T, Palepu K. 2000. The future of business groups in emerging markets: Long-run evidence from Chile. *Academy of Management Journal*, ***43***(3), 268-285.

Khanna T, Palepu KG, Sinha J. 2005. Strategies that fit emerging markets. *Harvard Business Review*, ***83***(6), 63–76.

Kiggundu MN, Jørgensen JJ, Hafsi T. 1983. Administrative theory and practice in developing countries : A synthesis. *Administrative Science Quarterly*, ***28***(1), 66–84.

Kleinbaum DG, Klein M. 2005. *Survival analysis: A self-learning text*. 2nd ed. New York, NY: Springer.

Klingebiel R, Adner R. 2015. Real options logic revisited: The performance effects of alternative resource allocation regimes. *Academy of Management Journal*, ***58***(1), 221-241.

Kolk A, Lenfant F. 2010. MNC reporting on CSR and conflict in Central Africa. *Journal of Business Ethics*, ***93***, 241–255.

Leke A, Lund S, Roxburgh C, Van Wamelen A. 2010. What's driving Africa's growth? McKinsey Quarterly. Retrieved November 10, 2013, from http://www.mckinsey.com/insights/economic_studies/whats_driving_africas_growth

London T, Hart SL. 2004. Reinventing strategies for emerging markets: Beyond the transnational model. *Journal of International Business Studies*, ***35(****5*), 350-370.

Mair J, Marti I. 2009. Entrepreneurship in and around institutional voids: A case study from Bangladesh. *Journal of Business Venturing*, ***24***(*5*), 419-435.

Maitland E, Sammartino A. 2012. Flexible footprints: Reconfiguring MNCs for new value opportunities. *California Management Review,* ***54***(*2*), 92-117.

Makino S, Isobe T, Chan CM. 2004. Does country matter ? *Strategic Management Journal*, ***25***(10), 1027–1043.

March JG. 1991. Exploration and exploitation in organizational learning. *Organization Science*, ***2***(1), 71-87.

Markides CC. 1992. Consequences of corporate refocusing: Ex ante evidence. *Academy of Management Journal*, ***35***(*2*), 398-412.

McKinsey Global Institute. 2010. *Lions on the move: The progress and potential of African economies*. Available at http://www.mckinsey.com/insights/africa/lions_on_the_move[accessed 18 November 2015]

Meyer KE, Peng M. 2016. Theoretical foundations of emerging economy business research. *Journal of International Business Studies*, ***47***(*1*): 3–22.

Miles RH, Cameron KS. 1982. *Coffin nails and corporate strategies*. Englewood Cliffs, NJ: Prentice-Hall.

Miller SR, Eden L. 2006. Local density and foreign subsidiary performance. *Academy of Management Journal*, ***49***(*2*), 341-355.

Moulton WN, Thomas H. 1993. Bankruptcy as a deliberate strategy: Theoretical consideration and empirical evidence. *Strategic Management Journal*, ***14***(2), 125-135.

Nachum L, Zaheer S. 2005. The persistence of distance? The impact of technology on MNE motivations for foreign investment. *Strategic Management Journal*, ***26***(8), 747-767.

Nickerson JA, Hamilton BH, Wada T. 2001. Market position, resource profile, and governance: linking Porter and Williamson in the context of international courier and small package services in Japan. *Strategic Management Journal*, ***22***(3), 251–273.

North D. 1991. Institutions. *The Journal of Economic Perspectives*, ***5***(1), 97–112.

Palepu K. 1985. Diversification strategy, profit performance and the entropy measure. *Strategic Management Journal*, ***6***(3), 239-255.

Peng MW. 2003. Institutional transitions and strategic choices. *Academy of Management Review*, ***28***(2), 275-296.

Peng MW, Lee SH, Wang DY. 2005. What determines the scope of the firm over time? A focus on institutional relatedness. *Academy of Management Review*, ***30***(3), 622-633.

Peng MW, Wang DY, Jiang Y. 2008. An institution-based view of international business strategy: a focus on emerging economies. *Journal of International Business Studies*, ***39***(5), 920–936.

Peng MW, Sun SL, Pinkham B, Chen H. 2009. The institution-based view as a third leg for a strategy tripod. *Academy of Management Perspective*, ***23***(3), 63–82.

Porter ME. 1981. The contributions of industrial organization to strategic management. *Academy of Management Review*, ***6***(4), 609-620.

Reeb D, Sakakibara M, Mahmood IP. 2012. From the editors: Endogeneity in international business research. *Journal of International Business Studies*, ***43***(3), 211-218.

Reuer JJ, Leiblein MJ. 2000. Downside risk implications of multinationality and international joint ventures. *Academy of Management Journal*, ***43***(2), 203-214.

Rugman AM, Verbeke A. 2004. A perspective on regional and global strategies of multinational enterprises. *Journal of International Business Studies*, ***35***(1), 3–18.

Santangelo GD, Meyer KE. 2011. Extending the internationalization process model: Increases and decreases of MNE commitment in emerging economies. *Journal of International Business Studies*, ***42***(7), 894–909.

Schotter A, Beamish P. 2013. The hassle factor: An explanation for managerial location shunning. *Journal of International Business Studies*, **44**(5), 521–544.

Shenkar O. 2004. One more time: International business in a global economy. *Journal of International Business Studies*, ***35***(2), 161–171.

Singer JD, Willett JB. 2003. *Applied longitudinal data analysis: Modeling change and event occurrence*. Oxford University Press.

Slangen A, Beugelsdijk S. 2010. The impact of institutional hazards on foreign multinational activity: A contingency perspective. *Journal of International Business Studies*, ***41***(6), 980–995.

Sørensen JB, Stuart TE. 2000. Aging, obsolescence, and organizational innovation. *Administrative Science Quarterly*, ***45***(1), 81-112.

Taussig, M., & Delios, A. 2015. Unbundling the effects of institutions on firm resources: The contingent value of being local in emerging economy private equity. *Strategic Management Journal*, ***36***(12), 1845–1865.

Teece DJ, Pisano G, Shuen A. 1997. Dynamic capabilities and strategic management. *Strategic Management Journal*, **18**(7), 509-533.

Thompson JD. 2011. *Organizations in action: Social science bases of administrative theory* (Vol. 1). New Jersey: Transaction Publishers.

UNCTAD. 2013. Press release. 026. June 26. Available at http://unctad.org/en/pages/PressRelease.aspx?OriginalVersionID=136[accessed 18 November 2015]

UNCTAD. 2015. World Investment Report. Available at http://unctad.org/en/pages/PublicationWebflyer.aspx?publicationid=1245[accessed 18 November 2015]

Vernon R. 1994. Contributing to an international business curriculum: An approach from the flank. *Journal of International Business Studies*, ***25***(2), 215–227.

Walsh JP. 2015. Organization and management scholarship in and for Africa… and the world. *Academy of Management Perspectives*, ***29***(1), 1-6.

Wan WP. 2005. Country resource environments, firm capabilities, and corporate diversification strategies. *Journal of Management Studies*, ***42***(1), 161-182.

Wan WP, Hoskisson RE. 2003. Home country environments, corporate diversification strategies, and firm performance. *Academy of Management Journal*, ***46***(1), 27-45.

Welch C, Piekkari R, Plakoyiannaki E, Paavilainen-Mäntymäki E. 2011. Theorising from case studies: Towards a pluralist future for international business research. *Journal of International Business Studies*, ***42***(5), 740–762.

Williamson OE. 1985. *The economic institutions of capitalism*. New York: Free Press

Williamson OE. 1991. Strategizing, economizing, and economic organization. *Strategic Management Journal*, ***12***(2), 75-94.

Williamson OE. 1999. Strategy research: governance and competence perspectives. *Strategic Management Journal*, ***20***(12), 1087-1108.

Williamson OE. 2000. The new institutional economics: Taking stock, looking ahead. *Journal of Economic Literature*, 595-613.

Woodcock P, Beamish PW, Makino S. 1994. Ownership-based entry mode strategies and international performance. *Journal of International Business Studies,* ***25***(2), 253–273.

World Bank. 2002. *Building Institutions for markets*. World Development Report. Washington, DC.

Wright M, Filatotchev I, Hoskisson RE, Peng MW. 2005. Guest editors' introduction strategy research in emerging economies : Challenging the conventional wisdom. *Journal of Management Studies*, ***42***(1), 1–33.

Xu D, Meyer KE. 2012. Linking theory and context: "strategy research in emerging economies" after Wright et al. (2005). *Journal of Management Studies*, ***50***(7), 1322–1346.

Yang Q, Mudambi R, Meyer KE. 2008. Conventional and reverse knowledge flows in multinational corporations†. *Journal of Management*, ***34***(5), 882-902.

Zoogah DB, Peng MW, Woldu H. 2015. Institutions, resources, and organizational effectiveness in Africa. *Academy of Management Perspectives*, ***29***(1), 7-31.

Table 1. Comparison of subsidiaries in Africa and OECD countries across variables using t-tests and probit regression on matching model

	t-test of means		**Matching model**	
Variables	African subsidiaries	OECD subsidiaries	β	p-value
Subsidiary age	14.71	15.11	-0.00	0.97
Subsidiary size	2.26	2.32	-0.43	0.29
Ownership ratio	43.45	44.65	-0.00	0.99
Sector dummy	2.34	2.43	-0.64	0.14
Number of foreign parents	1.38	1.40	-0.17	0.66
Parent size	4.24	4.29	0.09	0.53
Parent R&D intensity	0.02	0.05	-0.00	0.64
Purpose diversity	0.70	0.90***		
Market-seeking orientation	0.44	0.59***		
Institutional voids	45.85	25.91***		
Institutional instability	0.76	0.29***		
Years before exit	5.74	6.57***		
Constant			2.83	0.12
Number of observations			2150	
Log-likelihood			-178.39	
Wald χ^2			4.12	

*p<.05; **p<.01; ***p<.001(two-tailed)

Table 2. Frequency distribution of investment purposes and motives

Motive category	Investment purpose	OECD subsidiaries		African subsidiaries	
		Frequency (purpose)	Frequency (motive)	Frequency (purpose)	Frequency (motive)
Efficiency seeking	Labour intensity	214	768	247	824
	Tax breaks for investment	38		198	
	Building international networks of production	343		330	
	Export to Japan	138		49	
	Financing and currency hedging	35		0	
Market seeking	Market access	1078	1468	672	844
	Building international networks of distribution	216		141	
	Export to other countries	39		31	
	Building new businesses	39		0	
	Controls business of the area	18		0	
	Trade conflict	78		0	
Resource seeking	Natural resources, materials	42	42	173	173
Strategic asset seeking	Alliance with customers in Japan	70	476	2	146
	Information gathering, royalty revenue	338		126	
	Research and development	68		18	
Others	Other purposes	34	34	83	83

Table 3. Data summary

Items	OECD subsidiaries	African subsidiaries	Total
Number of countries	10	28	38
Institutional voids(mean)	25.90	45.85	35.07[a]
Institutional instability(mean)	0.29	0.76	0.50[a]
Subsidiary years	1164	986	2150
Subsidiary cases	123	126	249
Exits	64	80	144
Median survival(years)	11	9	8[a]

[a] mean values

Table 4. Descriptive statistics and correlations (N = 2150)

Variables	Mean	SD		1	2	3	4	5	6	7	8	9	10	11	12	13
Subsidiary age	14.89	10.18	1													
Subsidiary size	2.28	0.61	2	0.24												
Ownership ratio	43.74	33.26	3	0.02	-0.21											
Sector dummy	2.37	0.55	4	-0.06	-0.36	0.30										
Number of foreign parents	1.39	0.61	5	0.03	0.04	0.04	-0.09									
Parent size	4.26	0.73	6	0.04	0.08	0.04	0.03	0.25								
Parent R&D intensity	0.04	0.02	7	-0.02	0.06	0.12	0.01	0.01	0.17							
Entry to Africa	0.46	0.50	8	-0.02	-0.09	-0.02	-0.13	-0.02	-0.05	-0.04						
Purpose diversity	0.81	0.68	9	-0.08	0.11	-0.00	-0.10	-0.02	0.13	-0.09	-0.15					
Market-seeking orientation	0.52	0.34	10	-0.04	-0.10	0.18	0.26	-0.02	0.06	0.01	-0.28	0.39				
Period dummies	0.93	0.81	11	0.08	-0.05	0.06	0.10	-0.04	0.07	0.04	0.13	0.09	0.08			
Institutional voids	35.05	11.68	12	0.07	-0.03	-0.07	-0.18	0.03	-0.08	-0.01	0.86	0.24	-0.14	-0.00		
Institutional instability	0.50	0.31	13	0.08	0.03	-0.18	-0.17	0.01	-0.14	-0.06	0.76	0.12	0.05	-0.07	0.80	
Survival (years)	6.17	4.19	14	0.39	0.15	-0.02	-0.09	-0.03	-0.03	0.11	-0.07	0.11	0.07	0.47	-0.03	-0.11

Correlation coefficients greater or equal to |0.05| are significant at a 5% level

Table 4. Results from the extended Cox regression model

Independent Variables	**Model 5**	**Model 4**	**Model 3**	**Model 2**	**Model 1**
Subsidiary age	0.009**	0.009**	0.009**	0.008**	0.008**
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Subsidiary size	-0.083*	-0.083*	-0.079	-0.077*	-0.079
	(0.042)	(0.042)	(0.042)	(0.042)	(0.042)
Ownership ratio	-0.003	-0.003	-0.003	-0.003	-0.003
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Sector- *Primary*	Reference	Reference	Reference	Reference	Reference
Secondary	0.081	-0.004	0.208	0.071	0.071
	(0.458)	(0.449)	(0.450)	(0.448)	(0.448)
Tertiary	0.900†	0.820	0.957*	0.784	0.784
	(0.488)	(0.481)	(0.484)	(0.481)	(0.481)
Number of foreign parents	-0.175	-0.169	-0.182	-0.173	-0.173
	(0.167)	(0.166)	(0.166)	(0.166)	(0.166)
Parent size	0.279	0.300†	0.255	0.276	0.271
	(0.128)	(0.127)	(0.125)	(0.122)	(0.122)
Parent R&D intensity	-0.070	-0.076	-0.074	-0.088	-0.168
	(0.120)	(0.118)	(0.120)	(0.115)	(0.107)
Country Dummies	Included	Included	Included	Included	Included
Entry to Africa	1.366**	1.103*	1.314*	0.660*	
	(0.515)	(0.432)	(0.515)	(0.322)	
Market-seeking orientation	-0.175	-0.350*	0.040		
	(0.266)	(0.174)	(0.241)		
Purpose diversity	0.177	0.264	-0.137		
	(0.235)	(0.211)	(0.169)		
Purpose diversity × Entry to Africa	-0.631*	-0.761*			
	(0.264)	(0.297)			
Market-seeking orientation × Entry to Africa	-0.292†		-0.585*		
	(0.092)		(0.281)		
Number of observations	2150	2150	2150	2150	2150
Log-likelihood	-766.063	-768.428	-769.833	-771.705	-773.374
$\chi 2$ testing model against null model	79.97***	77.24***	74.43***	102.84***	70.68***
$\chi 2$ testing model against Model 5	N/A	3.38†	4.51*	8.72***	17.20***
AIC	1477.10	1566.86	1569.66	1571.41	1575.32

†$p < .10$; *$p<.05$; **$p<.01$; ***$p<.001$(two-tailed)

Standard errors in parentheses.

Baseline hazards in all models are specific to the stratum of period that includes 1990-1995, 1996-2001, and 2002-2008.

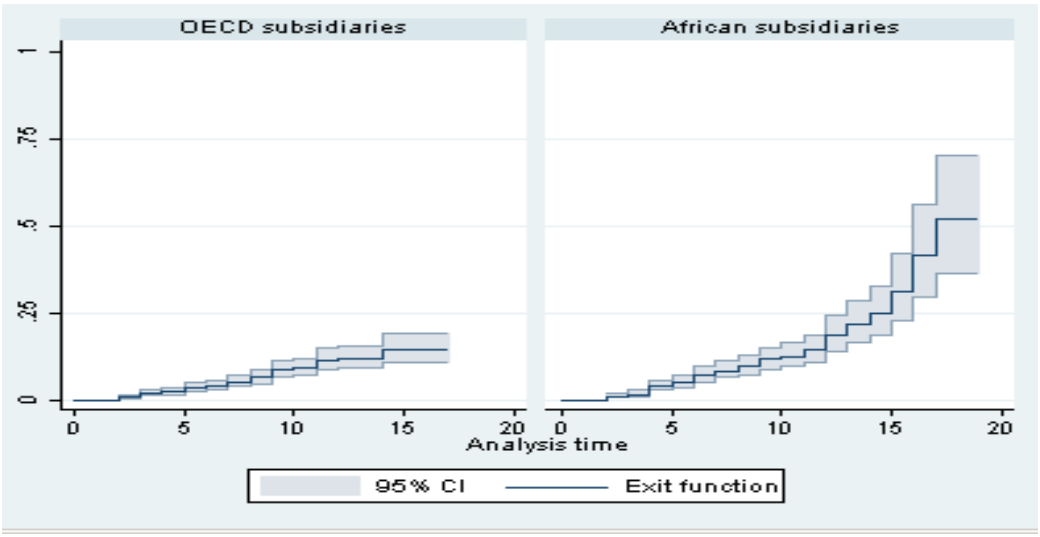

Figure 1. Estimated Hazard of subsidiaries operating in the OECD countries and Africa

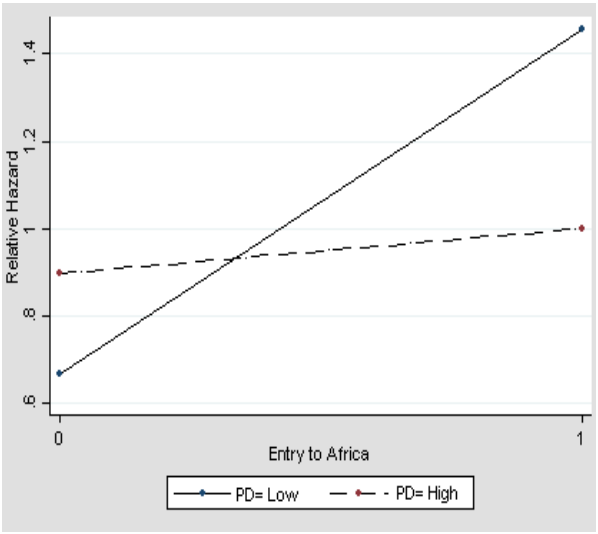

Figure 2. Moderating effects of purpose diversity

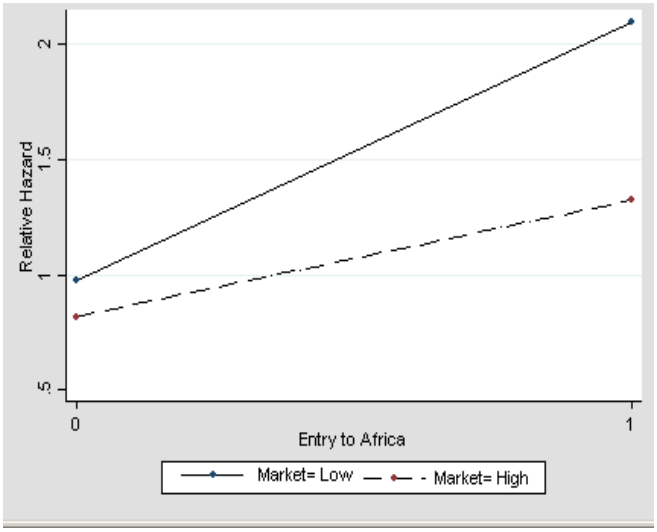

Figure 3. Moderating effects of market-seeking orientation